

style is that which prevailed from 1310 to 1350. The proportions of the whole building have been carefully corrected by existing examples, particularly from the south and south-west of England. The tower is said to be the largest finished tower near London, and contains ample room for a peal of eight bells. The tower-arch is open to the chancel, and affords a complete view of the west window. The upper string course is ornamented with the ball-flower of the period. The tracery of the nave and aisle windows is comparatively plain, but that of the east window is extremely elaborate. The aisle and nave are separated by a range of columns alternately octagon and circular. The roof is open, and the principals filled in with tracery of the period, a good example of which (that at Malling Abbey) was given to our readers a short time back, from the pencil of Mr. C. J. Richardson. The roof-timbers are supported by corbels of foliage. These, as well as the caps of the columns, have been executed by Mr. Nixon, jun., the nephew of the sculptor. This gentleman has also in hand the corbels for the chancel, and a reredos representing the two disciples at Emmaus. These, together with the greater part of the ornaments, are the munificent gifts of an individual who has contributed most largely to the purchase of the ground and to the building, and in every other way, but has most strictly forbidden any allusion to his name. The seats are plain and open, the bench-ends are moulded, and adorned with a simple poppyhead. The pulpit, &c., table and altar-rail, &c., are of oak, carved by Messrs. Pinkerton, of Eccleston-street. The font is of Box Shell-stone, and from the chisel of Mr. White, of Millbank. The altar-window of five lights is filled with stained glass, containing scriptural subjects interspersed with emblems, and is the work of Mr. Wailes, of Newcastle. The great west window of three lights, containing a figure of St. Barnabas, to whom the church is dedicated, and one at the west end of the aisle, also of three lights, containing a figure of St. Paul, are the works of Messrs. Ward and Nixon. The chancel windows, and several others in the aisle, are the work of Messrs. Powell, of Whitefriars. The whole of these designs (except for the stained glass) are from the pencil of Mr. Ashpitel. The floors of the aisles are paved with red and black Burslem tiles in various ancient figures. The roof and seats are not varnished, but merely rubbed over to shew the grain of the wood.

As it was imperative that the church should be lighted by gas, the architect found himself placed in considerable difficulty on this head, but he has designed some large Coronado lucis, from an idea that he saw at Rouen, and which are now being executed by Messrs. De Bauser, of Creed Lane, and it is hoped will form an ecclesiastical method of availing the church of this modern but brilliant light.

The whole fabric is of stone; the general walling of Maidstone rag-stone, and the dressings of Caen stone. The churchyard will be inclosed with a low rag-stone wall, with a Caen-stone coping.

The nature of the site has entailed great expense: the ground fell considerably, and a large bed of sand was found where the church was to be placed. The consequence was, that between 400*l.* and 500*l.* have been expended to make a good foundation, and to bring the church to a proper level, more than ought to be reckoned in ordinary sites. The works have been completed, by Mr. Holland, of Duke-street, in an excellent way, and the total cost will not exceed 4,400*l.*

THE ARMY AND NAVY CLUB COMPETITION.

In accordance with the determination of the committee, already mentioned by us, the six architects, whose plans received the greatest number of votes in the late competition, have been invited to submit fresh designs, and have agreed to do so. We give their names in alphabetical order:—Mr. G. S. Clarke (a pupil of Mr. Barry), Messrs. Fowler and Fisk, Messrs. Parnell and Smith (with whose plan the name of Count D'Orsay has been connected), Mr. H. B. Richardson, Mr. Sydney Smirke, and Mr. Tattersall.

Mr. Smirke was one of the competitors who withdrew his design before the exhibition took place.

OLD SASHES.



Fig. 1.

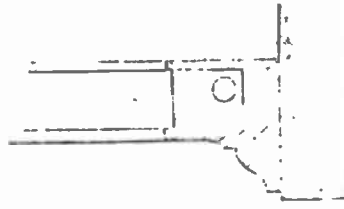


Fig. 2.

OLD SASHES AND FRAMES.

SIR,—I beg to send you two sketches of curious ancient fragments, discovered during some alterations at this place. The first is an old wood mullion of very good design, as early as the time of James I. This was found in the plastered wall surrounding the principal staircase, supposed to have been an open court. There were several windows very perfect; the walls were formed of quartering, filled with wattle and loam. The second sketch is made from one of the old sash frames, of the powder and pig-tail period. It is interesting, as it shows the extent of our improvements in this important part of our buildings.

J.
Wickham Court, Kent.

GEOMETRY OF THE SQUARE.*

Case 3rd.—When the triangle is right-angled, as ABC (fig. 5), the sides being AB, AC, and the hypotenuse BC respectively, it is required to convert the right-angled triangle ABC into a square of equal area.

Construction.—Through C, the vertex of the triangle, draw the straight line CI paral-

lel to the base AB, and extend it towards I as far as necessary. Bisect the base AB in L, and through L draw LD parallel to AC and meeting CI in D; then is ACID a rectangular parallelogram equal to the triangle ABC.

Bisect CI in H, and on H as a centre, with the diameter CI, describe the semicircle CGI meeting LD, the side of the rectangle produced, in G; then is HG the side of a square which is equal in area to the rectangle ACID. On DG describe the square DGEF, and it will be equal to the given triangle ABC, so that the conversion required by the problem has been effected.

PROBLEM.—To construct a square that shall be equal in area to a given quadrilateral figure; that is, to convert a given quadrilateral figure or trapezium into a square of equal area.

Example.—Let ABCD (fig. 7) be the given trapezium or quadrilateral figure, of which the containing sides are AB, BC, CD, and DA, it is required to convert the trapezium ABCD into a square of equal area.

Construction.—Draw the diagonal BD dividing the given figure into the two triangles BAD and BCD, and through the angle A, draw the straight line AK parallel to the diagonal BD, and meeting CD produced in K; draw BK intersecting AD, the side of the trapezium, in r, and the triangle KBC, thus

GEOMETRY OF THE SQUARE.

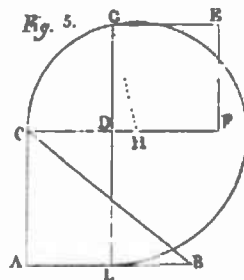


Fig. 5.

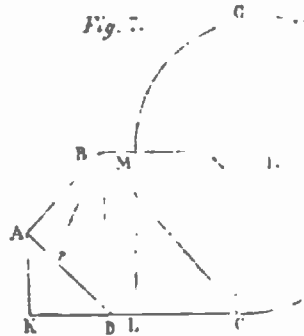


Fig. 7.

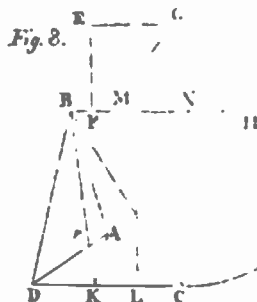


Fig. 8.